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SEP 01 2006
PATENT & TRADEMARK OFFICE

DOCKET NO.: 219015US8/rle

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Yoshihiro ISHIKAWA, et al.

GROUP: 2617

SERIAL NO: 10/060,248

EXAMINER: CAI, WAYNE HUU

RCE FILED: OCTOBER 13, 2005

FOR: HANDOVER CONTROL METHOD, MOBILE STATION AND COMMUNICATION CONTROL APPARATUS

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a Notice of Appeal and Request for Extension of Time Under 37 C.F.R. § 1.136 for the second and third month.

The review is requested for the reason(s) stated on the attached sheet(s). I am the attorney or agent of record.

Respectfully Submitted,

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YOSHIHIRO ISHIKAWA, ET AL.	: EXAMINER: CAI, WAYNE HUU
SERIAL NO: 10/060,248	:
RCE FILED: OCTOBER 13, 2005	: GROUP ART UNIT: 2617
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REMARKS ACCOMPANYING REQUEST FOR PRE-APPEAL BRIEF CONFERENCE

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicants respectfully request that a Pre-Appeal Brief Conference be initiated in accordance with the pilot program outlined in the Official Gazette Notice of July 12, 2005.

Claims 1, 3-10 and 12 are pending in the application.

In the outstanding Official Action, Claims 1, 3-10 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Lindsay et al. (U.S. Patent Publication No. 2002/0009070 A1, hereinafter "Lindsay") in view of Raith (U.S. Patent No. 6,711,408 B1, hereinafter "Raith") and in further view of Ida et al. (U.S. Patent Publication No. 2002/0082036 A1, hereinafter "Ida").

The outstanding Official Action rejected Claims 1, 3-10 and 12 under 35 U.S.C. § 103 as unpatentable over Lindsay in view of Raith, and in further view of Ida. The Official Action cites Lindsay and Ida as disclosing the Applicants' invention with exception of the

steps of receiving a handover history and selecting at least a handover destination candidate. In an attempt to remedy these deficiencies, the Official Action cites Raith and states that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine these references to arrive at the Applicants' claims. Applicants respectfully traverse this rejection as Raith fails to teach or suggest the features of Claims 1 and 12 for which it is asserted.

Independent Claim 1 relates to a handover control method in which a mobile station is able to request handoff between base stations when a connection quality between the base station and a mobile station falls below a threshold. When this occurs, the communication control apparatus receives a handover request and a handover history from the mobile station. The handover history identifies origination and destination base stations of previous successful handovers of the mobile station. The communication control apparatus then selects at least one handover candidate based, at least, on the received handover history.

Specifically, independent Claim 1 recites *inter alia*, handover control method, comprising:

> ... said communication control apparatus:
> ***receiving a handover history from the mobile station***,
> said handover history ***identifying origination and destination base stations of previous successful handovers of the mobile station***;
> selecting a handover destination candidate ... based at least on the received handover history...

Independent Claim 12, while directed to an alternative embodiment, recites substantially similar features as those emphasized above. Accordingly, the arguments presented below are applicable to both independent Claims 1 and 12.

As described, in a non-limiting, exemplary embodiment, at pp. 19-21 and Fig. 2 and 5 of the specification, the moved history notification part in the mobile station reads moved

history (e.g., handover history or area residing history) of the mobile station from its own memory, and sends this moved history to the base station. This, handover history, or moved history, identifies origination and destination base stations of previous successful handovers of the mobile station. Thus, the mobile station of the present invention does not simply report handover occurrences to a base station; the mobile station actually stores a handoff history, which is subsequently sent to a base station.

Turning to the applicable secondary reference, Raith describes a method in which a location of a cellular phone is monitored, and the future path of the phone may be projected based on geographic path information stored within the network.[1] The stored path information is then used in conjunction with the location information received from the mobile device to determine a suitable handoff destination.

Raith, however, fails to teach or suggest ***receiving a handover history from the mobile station,*** which identifies ***origination and destination base stations of previous successful handovers of the mobile station***, as recited in independent Claim 1.

In addressing this claimed feature, the Final Official Action of March 1, 2006 (herein "Final Official Action"), cites col. 6 lines 31-38 of Raith, and states that the reference "describes that frequently traveled routes are stored in a route server connected to the mobile communication network 10, such as in the MSCs 14, the HLR 15, or at any other location," and that these stored routes are used to assist in making handoff decisions. Further, the outstanding Official Action states:

> The passage above teaches that MSC or HLR stores frequently traveled routes of the mobile station, which is the history of the mobile station. This information is obviously *received from the mobile station*. Raith further teaches that ***one or more hand-off positions long*** (sic) ***each route are preferably stored in the route server***, in which it means that Raith describes *a*

[1] Raith, Figs. 3-4.

> *handover history from the mobile station* because based on traveled routes, and hand-off position where it was taken place, the MSC or HLR stores this information...

Thus, the Final Official Action asserts that "the MSC or HLR stores frequently traveled routes of the mobile station, which is the history of the mobile station." While the information stored in the MSC or HLR may be handoff history information of the mobile station, such information is not "obviously received from the mobile station," as asserted in the Final Official Action.

As described at Fig. 4, and col. 6, lines 55-60 of Raith, when a mobile terminal (20) enters the service area of the mobile communication network (10), the position of the mobile terminal (20) is monitored and its path is determined. Thus, the "frequently traveled routes" of Raith, are determined by detecting the location and movement of the mobile station, which may be reported at an instant in time by the mobile station. This "history of frequently traveled routes," however, is stored in the HLR or MSC and not the mobile station. Further, the "history..." is populated based on real-time reports of a current location of the mobile station, and not reports of past locations from the mobile station.

Therefore, the MSC or HLR or Raith may store a history of previous hand-off locations of the mobile device, but this history is based on past real-time reports from the mobile device. At no point does Raith teach or suggest that the mobile station in his device sends any information identifying origination and destination base stations of ***previous successful handovers of the mobile station***, whatsoever.

Further, since the MSC or HLR of Raith stores the past hand-off information, there is no motivation or suggestion for a mobile stations in Raith's system to store and report a handover history to an MSC or HLR, which already tracks an stores this information.

The Advisory Action of July 28, 2006 relies on similar rationale in maintaining the rejection of the Final Official Action, as noted above. Specifically, the Advisory Action cites col. 6, lines 44-48 of Raith, and states that "[t]he Examiner notes that the stored hand-off positions is considered as a handover history." As noted above, in Raith, the previous hand-off positions are stored in the MSC or HLR and not in the mobile device.

The Advisory Action further states that "the communication control apparatus must receive the stored hand-off positions (i.e. handover history) from the mobile station." As noted above, however, Raith describes that the mobile station transmits a current location, and fails to teach or suggest sending information relating to past hand-offs, whatsoever.

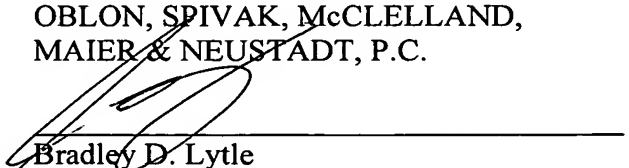
Therefore, Raith's MSC or HLR may receive information from a mobile station regarding its position at a current point in time, but at no point does the mobile station send ***a handover history*** identifying ***origination and destination base stations of previous successful handovers of the mobile station***, as recited in independent Claims 1 and 12.

Accordingly, Applicants respectfully request that the rejection of independent Claims 1 and 12 (and the claims that depend therefrom) under 35 U.S.C. § 103 be withdrawn.

Based on the above-noted deficiencies in the outstanding rejections, Applicant respectfully requests that those rejections be withdrawn or properly supported.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



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